

**AGREEMENT
BETWEEN THE CITY OF SAN JOSE AND
THE SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
FOR RIPARIAN IMPROVEMENTS IN UPPER PENITENCIA CREEK
IN ALUM ROCK PARK**

THIS AGREEMENT ("Agreement") is made and entered into this _____ day of December, 2011 ("Effective Date"), by and between the CITY OF SAN JOSE, a municipal corporation of the State of California ("CITY"), and the SANTA CLARA VALLEY TRANSPORTATION AUTHORITY, a public agency organized as a special district under California law ("VTA"). Hereinafter, CITY and VTA may be individually referred to as "Party" or collectively referred to as "Parties".

RECITALS

A. **WHEREAS**, CITY is in the process of completing an Initial Study and securing environmental clearance and approval and permits from Federal and State regulatory agencies to proceed with thirteen (13) projects identified in the Alum Rock Park Riparian Management Plan ("RMP") to restore and enhance native aquatic and riparian habitats, restore stream functions, and protect public health and safety along Upper Penitencia Creek; and

B. **WHEREAS**, VTA will be constructing improvements as part of the Mission/Warren/Truck-Rail ("MWT") Program located in the City of Fremont, including Agua Fria, Toroges and Agua Caliente Creek Improvements, that cannot be completely mitigated within the limits of or adjacent to the MWT program site; and

C. **WHEREAS**, the California Regional Water Quality Control Board ("RWQCB") has authorized VTA to implement four (4) of the Upper Penitencia Creek restoration and enhancement projects identified in the Alum Rock Park RMP to mitigate the impacts from the MWT Program. These four projects, identified in EXHIBIT A as Projects 3, 5, 10 and 13, are hereinafter collectively referred to as the "Mitigation Projects;" and

D. **WHEREAS**, CITY agrees under this Agreement to allow VTA to enter City property and implement the Mitigation Projects for VTA's mitigation credits for the MWT project, subject to environmental clearance, issuance of required approval and permits from all applicable governmental entities, and the terms and conditions contained herein, and VTA has agreed to be solely responsible for all costs and liability for the design, construction, administration and management of the Mitigation Projects as set forth herein; and

E. **WHEREAS**, the Youth Science Bridge repair project ("Project 2"), as identified in EXHIBIT A, is directly adjacent to Project 13, and CITY and VTA agree that Project 13 and Project 2 should be constructed simultaneously to minimize impact on the fish habitat. Since Project 2 is not an eligible mitigation project for VTA's MWT project, VTA has agreed to bid, award, administer, and manage construction of Project 2 as part of the Mitigation Projects, subject to CITY's financial contribution as set forth herein; and

F. **WHEREAS**, the Parties wish to set forth in this Agreement their respective obligations in connection

with the Mitigation Projects and Project 2 (collectively, the “PROJECT”);

NOW, THEREFORE, in consideration of the mutual promises contained in this Agreement, the Parties agree as follows:

AGREEMENT

1. Scope of Work.

- a. Mitigation Projects: Subject to CITY securing environmental clearance and required regulatory approvals and permits, VTA, at its sole cost, shall provide all development, including design, bidding, construction, administration and management necessary to complete the Mitigation Projects, all as more particularly described in EXHIBIT A, the Initial Study for Alum Rock Park Bank Repair and Stream Restoration Projects and any required mitigation pursuant to CEQA (“Environmental Documents”) specifically for the Mitigation Projects, and this Agreement:
 - i. Remove an existing fish passage barrier created by a concrete weir by constructing a stable roughened channel downstream from the Youth Science Bridge (“Project 13”); and
 - ii. Repair rill erosion with a new grouted rock wall and an asphalt berm at the pavement edge to route parking lot runoff away from the area downstream from the Youth Science Bridge (“Project 5”); and
 - iii. Repair rock wall immediately downstream from Bridge “L” (“Project 3”); and
 - iv. Expand floodplain immediately downstream from Bridge “L” (“Project 10”).
- b. Project 2: Subject to CITY securing environmental clearance pursuant to CEQA, regulatory approval and permits, any required mitigation pursuant to CEQA and the Environmental Document, and CITY’s Contribution as described below in Section 2, VTA shall include Project 2 as an “Optional Bid” as part of any public competitive bid for the Mitigation Projects and provide construction administration and management services required to complete the Youth Sciences Institute Bridge abutment repair (“Project 2”) as described herein.

2. Financial Contribution.

- a. Mitigation Projects: VTA shall bear the full cost for development of the Mitigation Projects, including but not limited to, providing all design, construction, bidding, administration and management services to complete the Mitigation Projects, estimated at Two Million Five Hundred Thousand Dollars (**\$2,500,000**) (“VTA’s Contribution”). In the event that the lowest responsive bid received is higher than VTA’s Contribution, VTA may at its sole option terminate this Agreement with written notice to the City within sixty (60) days of the opening of the bids. If VTA fails to provide written notice of termination as set forth in this Section 2a or fails to

terminate this Agreement prior to commencement of construction as set forth in Section 7 below, VTA shall be required to complete the Mitigation Projects and provide any additional funding above VTA's Contribution to complete the Mitigation Projects, as set forth herein. City shall not be required to contribute any funding towards the development of the Mitigation Projects under this Agreement.

- b. Project 2: CITY shall contribute an amount not to exceed Four Hundred Seven Thousand Five Hundred and Fifty Dollars (**\$407,550**) ("CITY's Contribution") to VTA for construction, construction management, and contingency for Project 2 as follows: Within one (1) month following the Notice of Award and upon receipt of VTA's invoice, unless otherwise requested by VTA and approved in writing by the CITY's Director of Parks, Recreation & Neighborhood Services ("CITY's Director"), CITY shall deposit CITY's Contribution, in the amount up to Four Hundred Seven Thousand Five Hundred and Fifty Dollars (\$407,550) for all bid items assigned to Project 2 (attached hereto as EXHIBIT B is the estimated bid items for Project 2), including construction management services and change order costs, into VTA's designated, interest-bearing account. VTA shall use CITY's Contribution, including interest earned thereon, for the sole purpose of completing the bid items assigned to Project 2, as set forth in this Agreement.
- i. VTA shall draw down on CITY's Contribution only for allowable expenses related to Project 2 and only as they are incurred. VTA shall include supporting documentation, subject to CITY approval, for construction cost and change orders with the monthly cost reports and progress updates. During the term of this Agreement, the following expenses are allowable and shall be itemized on all VTA invoices:
- (a) Construction cost for Project 2, with no VTA mark-up; and
 - (b) Change orders for Project 2, with no VTA mark-up; and
 - (c) Administration and management services, up to ten percent (10%) of the combined construction and change orders costs.
- Expenses not listed above are not allowable and shall not be reimbursed unless previously approved in writing by CITY's Director.
- ii. VTA has completed a Phase II Soil Sample Report for Project 2 as part of the activities for the Mitigation Projects. In addition to City's Contribution as set forth above, City hereby agrees to reimburse VTA the amount not to exceed One Thousand Five Hundred Dollars (\$1,500.00) for the Phase II Soil Sample Report for Project 2.
- iii. VTA is also required at its sole cost, except provided herein, to conduct surveys and report the presence of special-status bat species in accordance with applicable Federal and State environmental regulations for the PROJECT. The report will inform VTA if any bat habitats need to be protected in accordance with applicable Federal and State environmental regulations and if alternative roosting habitats will need to be built to mitigate disruption of bat habitats. City hereby agrees to reimburse VTA the amount not to exceed Two Thousand Five Hundred Dollars (\$2,500) for the cost of the bat surveys and report solely related to Project 2, and agrees to additionally reimburse VTA for the

cost of any bat mitigation measures required during construction of Project 2.

3. **VTA Responsibilities.**

- a. VTA agrees to do each of the following:
 - i. Upon execution of this Agreement, VTA shall meet with CITY and form a PROJECT team of stakeholders to include CITY and VTA staff so that close coordination and interaction between the agencies during the PROJECT can be maintained. VTA shall include CITY staff as active participants within VTA's PROJECT management process, hold regularly scheduled meetings as agreed upon by the PROJECT team to assess the progress of PROJECT development and address PROJECT issues as they arise. All design and conceptual plans relating to the PROJECT, including the plans and specifications and the bid package, shall be coordinated with City, and subject to City review and written approval, prior to issuance and/or commencement of work, as applicable.
 - ii. Administration of all development, including design and construction, of the Mitigation Projects. Administration for purposes of this provision shall include, but not limited to the following; preparation and completion of conceptual plans, architectural drawings, engineering drawings, surveying and mapping, collection and review of data, construction documents, plans and specifications, contract documents and cost estimates; coordination with various applicable regulatory agencies; propagule (seed) collection; obtaining and reviewing bids; awarding the construction contract; administering the construction contract; providing materials control and inspection services; making progress and final payments to the all contractors; acceptance of the completed Mitigation Projects, as set forth herein.
 - iii. Administration of the construction of Project 2. Administration for purposes of this provision shall include public bidding, awarding the construction contract, administering the construction contract, coordination with various agencies, making progress and final payments to all the contractors, providing materials control and inspection services; and acceptance of the completed Project 2 improvements, as set forth herein.
 - iv. Include Project 2 as an "Optional Bid" in the public bid package for the Mitigation Projects as set forth in EXHIBIT B.
 - v. Notify CITY in writing within five (5) days of the opening all bids if the apparent lowest responsive bid's proposed actual construction costs (hereinafter, the "base") for Project 2 including administration and management costs and construction contract contingency equal an amount that exceeds CITY's Contribution. If the sum of the above costs exceeds CITY's Contribution, CITY shall have thirty (30) days from date of receipt of VTA's notice to provide written

notice to VTA with one of following options: (1) authorize VTA to proceed with the Optional Bid items for Project 2, as outlined in EXHIBIT B, above the base price, in which case, CITY shall provide VTA with written confirmation that CITY shall deposit additional contribution equal to the difference of the total cost of Project 2 and CITY's Contribution and said deposit shall be made simultaneously with CITY's Contribution.; (2) authorize VTA to proceed with the Optional Bid items for Project 2 equal to or less than the base price by removing certain scope of services as outlined in EXHIBIT B from Project 2, or (3) advise VTA that Project 2 Optional Bid items will not be exercised. If CITY decides not to exercise Optional Bid items for Project 2, VTA shall not be obligated to re-bid the contract for the PROJECT. Such notice shall be given at the address set forth in Section 16 of this Agreement. With regard to the costs and contingency set forth above, the following definitions shall apply:

1. The base amount is defined as all bid items comprising Project 2 and the State/Federal Agency mitigation contingency specified in Exhibit B.
2. The cost for Project 2 administration and management is defined as ten percent (10%) of the base amount.
3. The construction contract contingency for change orders is defined as thirty percent (30%) of base amount.
4. Total cost of Project 2 is defined as the sum of the base amount plus ten percent (10%) of the base amount for administration and management plus thirty percent (30%) of the base amount for construction contract contingency for change orders.

vi. VTA shall provide CITY with monthly progress updates showing expenditures for Project 2 after the Notice to Proceed. VTA shall actively monitor, as part of the monthly reports, actual Project 2 expenditures to ensure that CITY's Contribution will be sufficient to pay for planned Project 2 expenditures. If, at any time, planned Project 2 expenditures are projected to exceed Four Hundred Seven Thousand Five Hundred Fifty Dollars (\$407,550), VTA shall immediately notify CITY in writing of the change in the projected expenditures. The Parties shall then have the following options:

- (a) Revise Project 2 scope in accordance with the available funds, which revision can be accomplished only by written amendment mutually agreed upon by the Parties and approved by the CITY's Director;
- (b) Increase/revise CITY's Contribution, which revision can be accomplished only by written amendment mutually agreed upon by the Parties and approved by the CITY Council.

vii. Include in the construction contract a warranty for all construction work associated with the Mitigation Project and Project 2. Said warranty shall meet the requirements set forth in CITY's Standard Specifications, Section 7-1.23

(hereinafter, "STANDARD SPECS"), which is fully incorporated herein by reference.

- viii. Take all steps necessary, at all times during the term of this Agreement, including after PROJECT acceptance, and at all times during the warranty period, to ensure the contractor corrects any work on the PROJECT that does not meet the PROJECT specifications as set forth in the construction contract.
- ix. Notify CITY on a timely basis in the event that any defects are discovered in the work performed under the construction contract. If during the warranty period either PARTY discovers any "defects," as that term is used in CITY's STANDARD SPECS, VTA shall take immediate action to enforce the provisions of the contractor's warranty and ensure that the contractor promptly takes all corrective measures as set forth in CITY's STANDARD SPECS.
- x. Designate a PROJECT manager for VTA, for the duration of the PROJECT, who shall have all the necessary authority to direct technical and professional work within the scope of the Agreement and who shall serve as the principal point of contact with CITY. VTA has designated Rachel Martinez as VTA PROJECT manager for the PROJECT. Ms. Martinez' phone number is (408) 546-7454.
- xi. Respond, within ten (10) calendar days, to any request by CITY for access to or copies of documentation of the Project 2 cost, including, but not limited to: original invoices and records of payment.
- xii. Forward a final statement of the Project 2 Cost to CITY within thirty (90) days of completion and acceptance of the PROJECT. Said statement shall include a listing of the cost of construction for all Project 2 work completed based on the actual contract unit prices paid by VTA and on any approved change orders. VTA shall attach to said statement any and all documentation supporting the amounts listed in the statement and invoice, including, but not limited to: invoices from the contractor, project specifications, and weight certificates.
- xiii. Maintain all PROJECT documents and documentation, including, but not limited to the following: PROJECT specifications, original invoices, and weight certificates for three (3) years from the date the PROJECT is accepted by both PARTIES.
- xiv. Except as set forth herein, complete all work for the PROJECT in accordance with this Agreement, CEQA, applicable permits and approvals from regulatory agencies, project specifications, and applicable laws, ordinances, and regulations. If Project 2 results in any permanent impacts to resources agency jurisdictional areas, the City will be responsible for mitigating those impacts. Construction of the PROJECT shall be deemed completed as of the date of acceptance by the VTA Resident Inspector, with written concurrence from CITY (the "Acceptance

Date”), subject to the following: (i) receipt of all as-built documents; (ii) receipt copies of all warranty documentation; and (iii) and completion of all punch list items. Subject to the terms and conditions of this Agreement, CITY shall assume full ownership and maintenance responsibility of the PROJECT as of the Acceptance Date, except for any maintenance, monitoring, and mitigation required for the Mitigation Project in accordance with the Mitigated Negative Declaration approved by the City Council for the PROJECT as described below.

- xv. VTA, at its sole cost, shall be solely responsible for the subsequent on-going mitigation monitoring and requirements set forth in the Mitigated Negative Declaration (MND) prepared for the Alum Rock Park Bank Repair and Stream Restoration Project (File No. PP08-203) for the Mitigation Projects. VTA shall comply with all terms and conditions of the on-going mitigation maintenance specified in the Mitigation Monitoring and Reporting Program (MMRP) and any applicable Federal or State permits.
- xvi. If contracted services are used by VTA to satisfy any terms, conditions of this Agreement, any such services performed by VTA’s contractors or subcontractors shall require VTA contractors or subcontractors to defend and indemnify CITY, its officers, agents and employees for any damages and injuries, including costs and attorneys fees, occurring from or arising out of the acts or omissions or willful misconduct or performance of the VTA contractors or subcontractors. VTA’s contractor and subcontractors shall name CITY as additional insured on all applicable insurance coverage required by VTA of its contractor and subcontractors and as required by this Agreement.
- xvii. Any hazardous materials or waste discovered during the term of this Agreement relating to the Mitigation Projects shall be handled and disposed of in compliance with all applicable laws at VTA sole cost and expense.
- xviii. Be solely responsible for all contractors and subcontractors working on the PROJECT on behalf of VTA, including making payments to the contractors and subcontractors, supervising the contractors and subcontractors, and ensuring the contractors and subcontractors are at all times in compliance with this Agreement and all applicable laws, ordinances, and regulations, and assumes all responsibility and liability for any work pursuant to this Agreement for the PROJECT, unless explicitly stated otherwise herein.

4. **CITY’s Responsibilities.**

- a. CITY agrees to do each of the following:
 - i. Obtain all applicable environmental clearance for the PROJECT.

- ii. Complete the design and provide certain administrative services for Project 2: preparation and completion of conceptual plans, architectural drawings, engineering drawings, surveying and mapping, collection and review of data, construction documents, plans and specifications, engineer's cost estimates, construction schedule, change notices, change orders; coordination with various agencies; providing materials control and inspection services, record drawings, and acceptance of the completed improvements, as set forth herein.
- iii. Designate a PROJECT manager for CITY, for the duration of the PROJECT, who shall have all the necessary authority to direct technical and professional work within the scope of the Agreement and who shall serve as the principal point of contact with VTA. CITY has designated Evelyn Velez-Rosario as CITY PROJECT manager for the PROJECT. Ms. Velez-Rosario's phone number is (408) 793-5552.
- iii. Any hazardous materials or waste discovered during the term of this Agreement relating to Project 2 shall be handled and disposed of in compliance with all applicable laws at CITY sole cost and expense.

5. **Permission to Enter.** By way of this Agreement and subject to the terms, conditions, and obligations contained in this Agreement, CITY hereby grants VTA and VTA's contactors permission to enter the PROJECT area, as set forth in EXHIBIT A. CITY represents and warrants that it has the right to grant VTA permission to enter in order to perform the activities set forth in this Agreement.

6. **Compliance with Governmental Requirements.** The Parties shall comply with all laws, ordinances, and regulations pertaining to the PROJECT under this Agreement.

7. **Term of Agreement.** This Agreement shall become effective on the Effective Date and shall remain in effect until the thirteenth anniversary of the Effective Date or until earlier termination. The Parties may mutually agree to extend this Agreement in writing for up to six (6) months.

8. **Written Termination.** Either Party's representative, as designated pursuant to Section 11 below, may terminate this Agreement within thirty (30) days written notice, for any reason, prior to the award of the construction contract for the PROJECT.

9. **Refund of CITY's Contribution.** Any balance of funds, including interest, remaining after completion of Project 2 or, if Project 2 does not proceed for any reason, upon early termination of Project 2, less any amounts necessary to pay for construction or construction management services rendered prior to the date of completion of Project 2 or the effective date of the termination of the Agreement, shall be refunded to the CITY. VTA shall refund to CITY its share of the remaining balance, within thirty (30) calendar days of the effective date of completion of Project 2 or termination of the Agreement.

10. **Audit and Record Retention.** CITY may audit the expenses incurred in the performance of this

Agreement. VTA shall retain all records related to the PROJECT for three (3) years after the completion of the project. During this period, VTA shall make these records available within a reasonable time to the CITY for inspection upon request.

11. Parties' Representatives. The General Manager of VTA or his designee is hereby made the representative of VTA for all purposes under this Agreement. The CITY's Director or designee is hereby made the representative of CITY for all purposes under this Agreement.

12. Indemnification. Pursuant to Government Code Section 895.4, each of the Parties hereto shall fully indemnify, defend and hold the other Party, its officers, employees and agents, harmless from any damage or liability imposed for injury (as defined in Government Code Section 810.8) occurring by reason of the negligent acts or omissions or willful misconduct of the indemnifying Party, its officers, employees or agents, under or in connection with any work, authority or jurisdiction delegated to such Party under this Agreement. Neither Party, nor any officer, employee or agent thereof shall be responsible for any damage or liability occurring by reason of the negligent acts or omissions or willful misconduct of the other Party hereto, its officers, employees or agents, under or in connection with any work, authority or jurisdiction delegated to such other Party under this Agreement.

13. Insurance. VTA shall require its contractor to secure and maintain in full force and effect at all times during construction of the PROJECT and until the PROJECT is accepted by CITY, public liability and property damage insurance in forms and limits of liability acceptable to both CITY and VTA naming CITY and VTA and their respective officers, employees and agents as additional insured from and against all damages and claims, loss, liability, cost or expense arising out of or in any way connected with the construction of PROJECT.

15. No Waiver. The failure of either Party to insist upon the strict performance of any of the terms, covenant and conditions of this Agreement shall not be deemed a waiver of any right or remedy that either Party may have, and shall not be deemed a waiver of their right to require strict performance of all of the terms, covenants, and conditions thereafter.

16. Notice. Any notice required to be given by either Party, or which either party may wish to give, shall be in writing and served either by personal delivery or sent by certified or registered mail, postage prepaid, addressed as follows:

To VTA: Santa Clara Valley Transportation Authority
Jim Costantini, Deputy Director
Engineering and Construction
3331 North First Street, Bldg. A
San Jose, CA 95134-1906

To CITY: City of San Jose
Attn: Julie Edmond-Mares, Acting Director
Parks, Recreation & Neighborhood Services
200 E. Santa Clara Street, 9th Floor Tower
San Jose, CA 95113-1905

Notice shall be deemed effective on the date personally delivered or, if mailed, three (3) days after deposit in the United States mail.

17. Dispute Resolution. If a question arises regarding interpretation of this Agreement or its performance, or the alleged failure of a Party to perform, the Party raising the question or making the allegation shall give written notice thereof to the other Party. The Parties shall promptly meet in an effort to resolve the issues raised. If the Parties fail to resolve the issues raised, alternative forms of dispute resolution, including mediation, may be pursued by mutual agreement. It is the intent of the Parties to the extent possible that litigation be avoided as a method of dispute resolution.

18. Entire Agreement. This Agreement constitutes the entire Agreement between the Parties pertaining to the subject matter contained therein and supersedes all prior or contemporaneous agreements, representations and understandings of the Parties relative thereto.

19. Amendments. Future amendments to this Agreement shall be processed by mutual written agreement of the Parties. Unless otherwise provided herein, any amendments to this Agreement must be approved by CITY Council. Whenever possible, notice to amend this Agreement shall be provided 90 calendar days prior to the desired effective date of such amendment.

20. Warranty of Authority to Execute Agreement. Each Party to this Agreement represents and warrants that each person whose signature appears hereon has been duly authorized and has the full authority to execute this Agreement on behalf of the entity that is a Party to this Agreement.

21. Severability. If any term, covenant, condition or provision of this Agreement, or the application thereof to any person or circumstance, shall to any extent be held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, covenants, conditions and provisions of this Agreement, or the application thereof to any person or circumstance, shall remain in full force and effect and shall in no way be affected, impaired or invalidated thereby.

22. Governing Law. This Agreement shall be construed and its performance enforced under California law.

23. Venue. In the event that suit shall be brought by either Party to this Agreement, the Parties agree that venue shall be exclusively vested in the State courts of the County of Santa Clara or, if federal jurisdiction is appropriate, exclusively in the United States District Court for the Northern District of California, in San Jose, California.

24. Prevailing Wages.

VTa shall pay, or cause to be paid, prevailing wages, as required by applicable City policies for any labor performed by its contractor(s) described in this Agreement.

WITNESS THE EXECUTION HEREOF the day and year first hereinabove set forth.

“CITY”

City of San Jose
a municipal corporation

By: _____
DENNIS D. HAWKINS, CMC
City Clerk

APPROVED AS TO FORM:

By: _____
JOHNNY V. PHAN
Deputy City Attorney

“VTA”

Santa Clara Valley Transportation Authority
a public agency

By: _____
MICHAEL T. BURNS
General Manager

APPROVED AS TO FORM:

By: _____
Counsel

EXHIBIT A
VTa MITIGATION PROJECT DESCRIPTIONS

Project 3. Removal of Rock Wall Downstream of Bridge L

Project 3 consists of removal of an approximately 120-ft long section of existing undercut, mortared, stone masonry retaining wall located on the left (east) overbank immediately downstream of historic foot bridge, Bridge L. The stream channel is confined by grouted rock walls on both sides. The encroachment of the wall on the stream channel has increased the channel velocity and caused undercutting. The rock wall is undercut for approximately 25 feet. In some locations the wall has been separated from its poured concrete footing and hangs unsupported above the creek. The scour extends under the rock wall by a distance of up to 36 inches.

Portions of the removed rock wall would be used on other projects that require masonry façade and to repair sections of wall located elsewhere in the park. The end points of the existing retaining wall would be curved around the existing grotto and the existing left, downstream abutment of Bridge L as scour protection. This would also allow adjacent existing grades to be maintained.

Project 10. Expansion of Floodplain Downstream of Bridge L

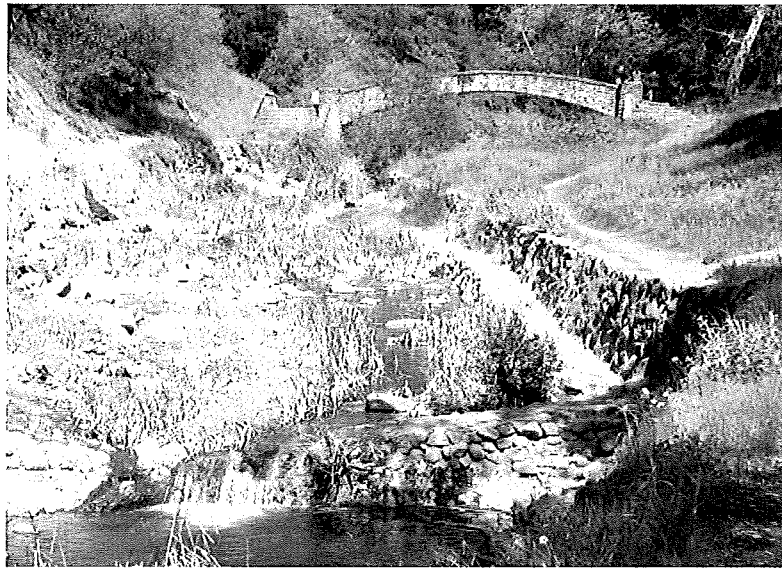
Project 10 includes widening of the floodplain for high flow relief, sediment exchange, and creation of refuge for juvenile steelhead. Project 10 would occur in the same location as Project 3, following rock wall removal. Grading would commence during the summer season just below ordinary high water with the resulting floodplain extending approximately 120 feet along the creek with a maximum width of 30 feet. This would create an estimated 2,590 square feet (.06 acre) of new floodplain and COE jurisdictional waters.



Project 3 & 10: Rock Wall looking upstream



Project 3 & 10: Rock Wall looking upstream



Project 3 & 10: Overview of floodplain creation area

Project 13. CEMAR fish passage improvement project

An undercut weir serving as a grade control structure 75 feet downstream of the YSI Bridge has caused a scour pool and a 4.5-foot vertical drop from the crest of the weir to the normal pool surface, creating a salmonid migration barrier. Weir removal could trigger upstream channel degradation and threaten the structural integrity of the bridge. This project proposes to leave the weir in place and to create a stable roughened channel suitable for fish passage.

The mitigation project will modify the existing concrete grade control structure and install a roughened channel. The roughened channel will extend approximately 48 linear feet upstream and 254 downstream of the modified concrete grade control structure. The roughened channel includes 12 rock band structures to control grade and six chutes and five pool structures. The overall slope of the channel would be approximately 4%. All work in the stream channel would occur while the channel is dewatered using coffer dams. Fill material would be placed

within an area of approximately 0.2 acres to create the roughened channel. The new streambed would be compacted with tamping and water to reduce subsurface flow; water used for jetting would be captured and recycled to prevent downstream escape of sediments.

As a result of the channel design, the OHW line would be elevated through the restored channel reach. There would be no significant net change in channel cross section, area of jurisdictional waters, or wetted area other than a slightly increased elevation of both channel bed and OHW line. There would be a significant improvement in fish migration capability, and there would also be a net gain in aquatic habitat quality.

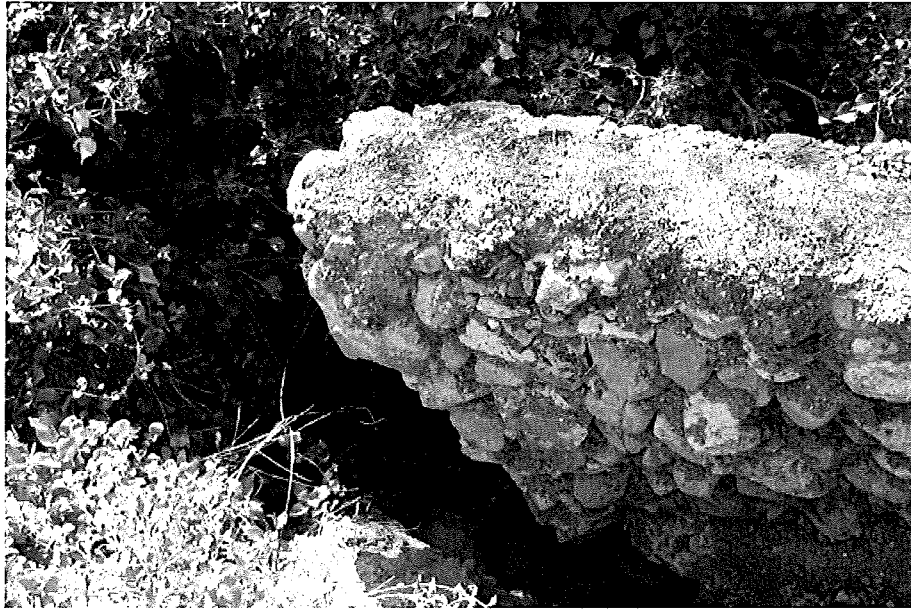
Associated bank improvements include slope regrading, rock wall removal, and revegetation in the downstream part of the project reach, with some rock protection placed at the toe of slope.



Project 13/CEMAR: Weir Area, Fish Barrier

Project 5. Repair of Eroded Rill

Adjacent to a grade control structure (see Project 13/CEMAR, above) 70 feet downstream of the YSI Bridge, a gap between two existing concrete sack walls has resulted in streambank erosion on the north bank. The failure may be related to existing runoff from a nearby parking lot. The unprotected section of bank is approximately 7 feet in length. The proposed project would connect the existing walls using rock and grout and conform to the existing side slope. Installation of steel piles may be required. This would reduce the amount of exposed soil at risk of erosion. Permanent impacts (0.002 acres) would be limited to a small area of wall footing extending below the ordinary high water line. The Project 5 work area overlaps with that described in the CEMAR project, above.



Project 5: Base of Slope with Failed Rock Wall.

EXHIBIT B
PROJECT 2 ESTIMATED BID COST

Project 2. Youth Sciences Institute (YSI) Bridge abutment repair

Project 2 is located at the left (south) upstream bank of Youth Science Institute (YSI) Bridge and consists of repair of erosion and failure of the upper bank. The bank failure occurs under a low, curved, stone masonry approach wall immediately adjacent to the bridge. Remnants of either a failed rock wall or cobble fill comprise the bank. This project would also protect and preserve an undercut mature (+/- 36-inch diameter) Deodar cedar, located on the left bank. The lower segment of the bridge abutment is in good condition and does not require repair.

The repair begins above ordinary high water and consists of a curved retaining wall with a return into bank to prevent future scour. The wall would protect the root mass of the cedar and bank. The length of the proposed wall is approximately 17 feet.

A mini-pile foundation (drilled and grouted into the typically shallow bedrock) would be used to support a cast-in-place concrete strip footing. The continuous, curved footing would support the new retaining wall. The base of the wall may be protected with new, selectively placed boulder revetment. The curved retaining wall would be constructed of cast-in-place concrete. For appearance, the curved retaining wall would be faced with stone masonry veneer to match the existing bridge construction.



Project 2: YSI Bridge looking Downstream, Deodar Cedar at Left

Cost Estimate Item Description	Estimate Cost
1. Site preparation	\$51,900
2. Bridge construction	\$169,600
3. Plantings	\$ 23,500
4. State/Federal Agency mitigation contingency	\$ 40,000
<i>Subtotal Construction Estimate</i>	<i>\$285,000</i>
Construction Contingency (30% of construction estimate)	\$ 85,500
VTA Construction Management Services (10% of actual construction and change order costs)	\$ 37,050
Total Estimated Project 2 Cost Estimate	\$407,550